

Supporting Information

Supplementary Table S1. Background and surgical factors for gastric cancer patients

Age	Mean ± SD	69.2 ± 10.3
Sex	Male	359 (75.9%)
	Female	114 (24.1%)
BMI, kg/m ²	Mean ± SD	23.0 ± 3.2
PNI	Mean ± SD	50.7 ± 5.9
Histological type	Differentiated	350 (74.6%)
	Undifferentiated	115 (24.5%)
	Others	4 (0.9%)
Pathological T status (pT)	1	366 (78.0%)
	≥2	103 (22.0%)
Pathological N status (pN)	0	416 (89.1%)
	≥1	51 (10.9%)
Pathological M status (pM)	0	462 (98.5%)
	1	7 (1.5%)
Operation time, min	Median (IQR)	296.5 (249.5 - 365.25)
Blood loss, ml	Median (IQR)	240 (100 - 400)
Lymph node dissection	D0	17 (3.6%)
	D1/1+	444 (93.9%)
	Others	12 (2.5%)
Nerve preservation	Celiac branch	213 (45.0%)
	Hepatic branch	339 (71.7%)
Approach for reconstruction	Laparotomy	282 (59.6%)
	Thoraco-laparotomy	2 (0.4%)
	Mini-laparotomy	114 (24.1%)
	Laparoscopy	72 (15.2%)
	Others	3 (0.6%)
Location of anastomosis	Intra-abdomen	459 (97.0%)
	Mediastinum/Intra-thorax	14 (3.0%)
Postoperative length of hospital stay, days	Median (IQR)	15 (13 - 20)

SD, standard deviation; BMI, body mass index; PNI, prognostic nutritional index;

IQR, interquartile range.

Supplementary Table S2. Details of patients who had anastomotic leakage or bleeding

	Age	Sex	BMI, kg/m ²	PNI	Disease	Operation time, min	Blood loss, ml	LN dissection	Approach	Location	Experience, case
Leakage (n=8)	75	Male	27.0	58.5	GC	241	315	D1	Laparotomy	Intra-abdomen	100
	74	Male	31.7	51.6	GC	279	610	D1	Laparotomy	Intra-abdomen	51
	61	Male	22.0	35.0	GC	429	115	D1+	Mini-laparotomy	Intra-abdomen	91
	62	Male	24.7	52.0	GC	496	270	D1+	Mini-laparotomy	Intra-abdomen	102
	69	Female	22.4	53.0	SMT	296	260	D0	Mini-laparotomy	Intra-abdomen	28
	68	Male	21.3	45.8	GC	341	10	D1+	Laparoscopy	Intra-abdomen	23
	59	Male	33.2	54.0	GC	293	260	D1+	Laparotomy	Intra-abdomen	108
	61	Male	24.0	57.6	GC	480	30	D1+	Laparoscopy	Intra-abdomen	3
Bleeding (n=3)	77	Male	31.5	52.2	GC	335	2500	D1	Laparotomy	Intra-abdomen	5
	70	Male	21.8	46.4	GC	464	2077	D1	Laparotomy	Intra-abdomen	14
	76	Male	24.9	54.8	GC	349	1400	D1+	Laparotomy	Intra-abdomen	14

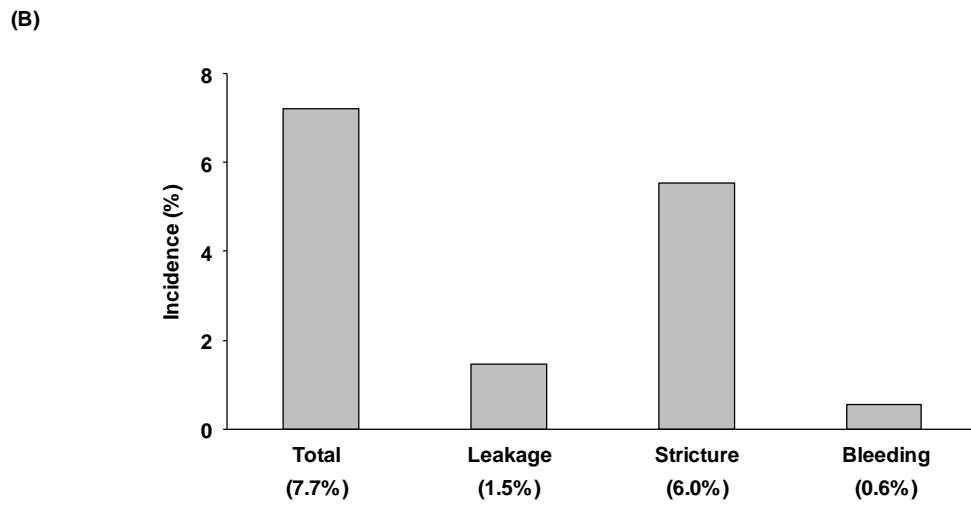
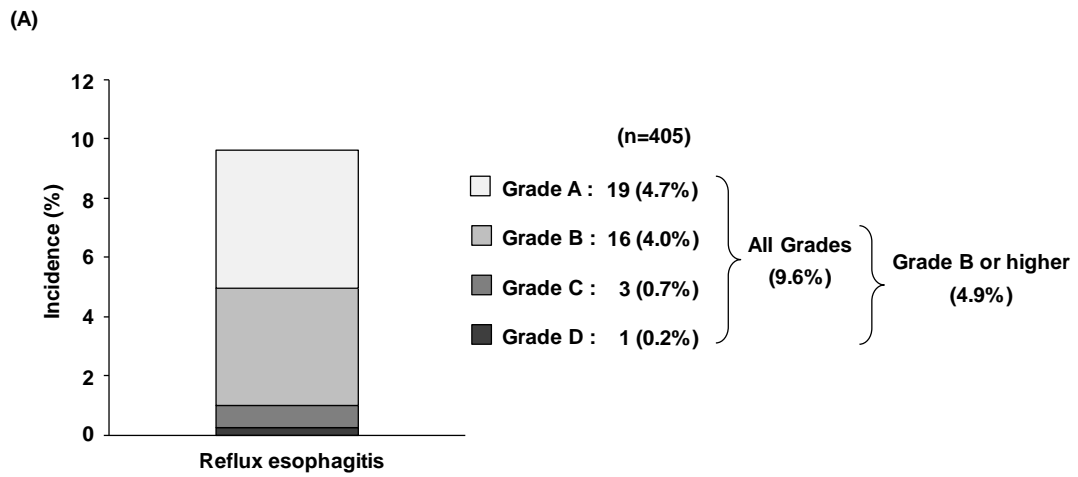
BMI, body mass index; PNI, prognostic nutritional index; LN, lymph node; GC, gastric cancer; SMT, submucosal tumor.

Supplementary Table S3. Risk factors for anastomotic stricture

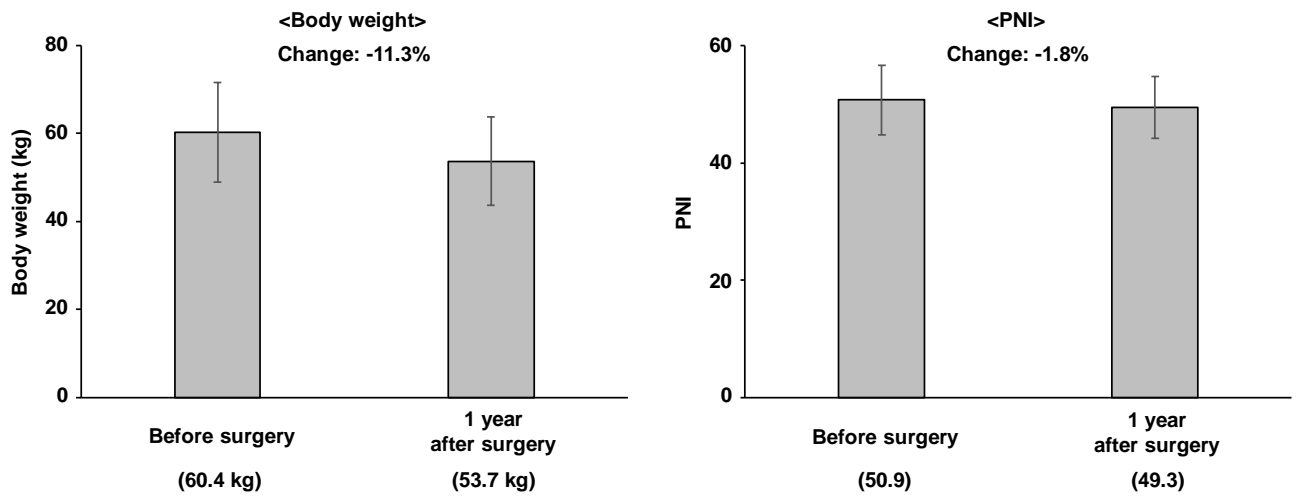
	Univariate	Multivariate		
	<i>p</i> value	OR	95% CI	<i>p</i> value
Age (≥ 80 years)	0.6555			
Sex (Male)	0.4833			
BMI (≥ 25 kg/m ²)	0.5578			
PNI (< 45)	0.3416			
Disease (Cancer)	0.3914			
Operation time (≥ 360 min)	0.6825			
Blood loss (≥ 500 ml)	0.9015			
Approach to reconstruction (Laparoscopy)	<0.0001	5.53	2.55-11.8	<0.0001
Anastomotic location (Mediastinum/Intra-thorax)	0.2848			
Experience (≤ 5 cases)	0.3890			

BMI, body mass index; PNI, prognostic nutritional index; OR, odds ratio; CI, confidence interval.

Supplementary Figure S1. Incidence of reflux esophagitis (A) and anastomosis-related complications (B) in gastric cancer cases



Supplementary Figure S2. Body weight and prognostic nutritional index (PNI) before surgery and at 1-year after surgery



Supplementary Figure S3. Incidence of anastomosis-related complications in relation to the learning curve for laparoscopic DFT reconstruction

